Notice of Allowability	Application No.	Applicant(s)
	10/679,134	DURLAM ET AL.
	Examiner	Art Unit
	Tan T. Nguyen	2827
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communication GHTS. This application is subject to	plication. If not included i will be mailed in due course. THIS
1. A This communication is responsive to the application filed on	n October 2, 2003.	
2. The allowed claim(s) is/are <u>1-31</u> .		
3. The drawings filed on are accepted by the Examiner	r.	
 4. ☐ Acknowledgment is made of a claim for foreign priority una a) ☐ All b) ☐ Some* c) ☐ None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" APPLICATION.	been received. been received in Application No cuments have been received in this of this communication to file a reply	national stage application from the
noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submit		'S AMENDMENT or NOTICE OF
INFORMAL PATENT APPLICATION (PTO-152) which give		
6. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.	
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-	948) attached
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the C	Office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the		
7. DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT R		
Attachment(s)		
1. ☑ Notice of References Cited (PTO-892)	5. Notice of Informal P	atent Application (PTO-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary	
3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0-Paper No./Mail Date 10/03; 11/04	Paper No./Mail Dat 8), 7. ⊠ Examiner's Amendr	e nent/Comment
4. Examiner's Comment Regarding Requirement for Deposit		ent of Reasons for Allowance
of Biological Material	9. 🔲 Öther	TAN T. NGUYEN PRIMARY EXAMINER
		GROUP 2500

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The Information Disclosure Statements submitted by Applicants on October 2,
 and November 3, 2004 have been received and fully considered.

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- 2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Vincent B. Ingrassia on February 17, 2005.
- 3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Claims 32-36 have been canceled.

In claim 17, line 1, the number "13" has been changed to --16--.

In claim 18, line 1, the number "13" has been changed to --16--.

In claim 21, line 1, the number "18" has been changed to --19--.

In claim 24, line 1, the number "18" has been changed to --23--.

In claim 25, line 1, the number "18" has been changed to --24--.

4. The following is an examiner's statement of reasons for allowance:

The closest prior art to the present invention is Iwata (U.S. Patent Application Publication No. US 2003/0161197). Iwata et al. disclosed a magnetic random access memory comprising a plurality of read blocks, wherein each read block includes a plurality of MTJ elements coupled to a plurality of write word lines, respectively, and a common read word line. Iwata failed to show or suggest the limitation of a first ganged memory cell having a first plurality of memory cells that include a MTJ, excluding an isolation device, and connected in series with other memory cells of the first ganged

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memory cells as claimed in claims 19-25; or the limitation of a first memory consisting of a first MTJ, and a second memory cell at least partially formed a first ganged memory cell with the first memory cell and consisting of a second MTJ that is connected in series with the first memory cell as claimed in claims 16-18 and 23-25. The prior art also failed to show or suggest a method of reading an MTJ in a ganged memory cell of an MRAM having steps of toggling the MTJ in the ganged memory cell, determining a second electrical value that is partially associated with the resistance of the ganged memory cell after the toggling of the MTJ.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan T. Nguyen whose telephone number is (571) 272-1789. The examiner can normally be reached on Monday to Friday from 07:00 AM to 03:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai Ho, can be reached at (571) 272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Tan T. Nguyen

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February 17, 2005